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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,631	03/11/2004	Hendrik Goesmann	71302	6664

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SCARBOROUGH, NY 10510-0827

EXAMINER

OLSON, LARS A

ART UNIT	PAPER NUMBER
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3617

DATE MAILED: 12/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/798,631

Applicant(s)

GOESMANN ET AL. *SG*

Examiner

Lars A Olson

Art Unit

3617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 08252004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
2. Claims 3, 4 and 12-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Claims 3, 4, 15 and 16 recite the limitation "the tower" in line 2. There is insufficient antecedent basis for this limitation in the claims.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
5. Claims 1, 2, 5, 8 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Grieshaber (US 1,802,943).

Grieshaber discloses the same submarine as claimed, as shown in Figures 1-6, that is comprised of a substantially cylindrical, elongate pressure hull, defined as Part #2 in Figure 2, and at least one elongate pressure antechamber, defined as Part #1, that is arranged transversely to a longitudinal axis of said pressure hull, as shown in Figure 2, where said pressure antechamber is further comprised of an access

opening to said pressure hull, defined as Part #37, that is closable in a pressure-tight manner, as shown in Figure 1, and an access opening to an outside of said pressure hull, defined as Part #4, that is closable in a pressure-tight manner.

6. Claims 17 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Kumm et al. (US 3,561,387).

Kumm et al. discloses the same method for retrofitting a pressure antechamber in a submarine, as shown in Figures 1-4, that is comprised of the steps of dividing said submarine transversely to a longitudinal axis of said submarine to form a section containing said pressure antechamber, as shown in Figure 1, and integrating said pressure antechamber into said submarine, as shown in Figure 1, where said divided submarine also has a tower section, defined as Part #10 in Figures 2 and 3.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grieshaber.

Grieshaber, as set forth above, discloses all of the features claimed except for the use of a pressure antechamber with an oval, double-ring or rectangular cross-section.

The use of a pressure antechamber having a specific cross-sectional shape would be considered by one of ordinary skill in the art to be a design choice based upon the intended contents of said pressure antechamber and the required interior space to fit said intended contents within said pressure antechamber.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to utilize a pressure antechamber of a specific shape in combination with the submarine as disclosed by Grieshaber for the purpose of providing a submarine with a pressure antechamber having increased interior space in order to facilitate entry into and exit from said pressure antechamber.

9. Claims 3, 4 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grieshaber in view of Kumm et al.

Grieshaber, as set forth above, discloses all of the features claimed except for the use of a pressure antechamber that is arranged within a section of a pressure hull in the region of a conning tower, and a pressure antechamber that is designed as a decompression chamber.

Kumm et al. discloses a submarine, as shown in Figures 1-4, with a pressure hull, defined as Part #5, and a pressure antechamber, defined as Part #20, that is designed as a decompression chamber, as described in lines 35-39 of column 2, and is arranged within said pressure hull in the region of a conning tower, defined as Part #10, as shown in Figures 2 and 3.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to utilize a submarine with a pressure antechamber that is

designed as a decompression chamber and arranged near a conning tower, as taught by Kumm et al., in combination with the submarine as disclosed by Grieshaber for the purpose of providing a submarine with a pressure antechamber that facilitates access to and from a conning tower of said submarine.

10. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Grieshaber in view of Auberty et al. (GB 2,108,054 A).

Grieshaber, as set forth above, discloses all of the features claimed except for the use of a pressure antechamber that is designed to accommodate an underwater craft.

Auberty et al. discloses a vessel, as shown in Figures 1-6, with a pressure antechamber, defined as Part #5, that is capable of accommodating an underwater craft, defined as Part #4.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to utilize a pressure antechamber that is designed to accommodate an underwater craft, as taught by Auberty et al., in combination with the submarine as disclosed by Grieshaber for the purpose of providing a submarine with a pressure antechamber that facilitates access of an underwater craft to and from said submarine.

11. Claims 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grieshaber in view of Kumm et al., and further in view of Auberty et al.

Grieshaber in combination with the teachings of Kumm et al. shows all of the features claimed except for the use of a pressure antechamber that is designed for accommodating an underwater craft.

Auberty et al., as cited above, discloses a vessel with a pressure antechamber, defined as Part #5, that is capable of accommodating an underwater craft, defined as Part #4.

The use of a pressure antechamber having a specific cross-sectional shape would be considered by one of ordinary skill in the art to be a design choice based upon the intended contents of said pressure antechamber and the required interior space to fit said intended contents within said pressure antechamber.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to utilize a pressure antechamber that is designed to accommodate an underwater craft, as taught by Auberty et al., in combination with the submarine as disclosed by Grieshaber and the teachings of Kumm et al. for the purpose of providing a submarine with a pressure antechamber that facilitates access of an underwater craft to and from said submarine.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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13. Any inquiry concerning this communication from the examiner should be directed to Exr. Lars Olson whose telephone number is (703) 308-9807.

lo

December 15, 2004

LARS A. OLSON
PATENT EXAMINER

Lars Olson

12 / 15 / 04